Drawings

1/10

Fig. 1

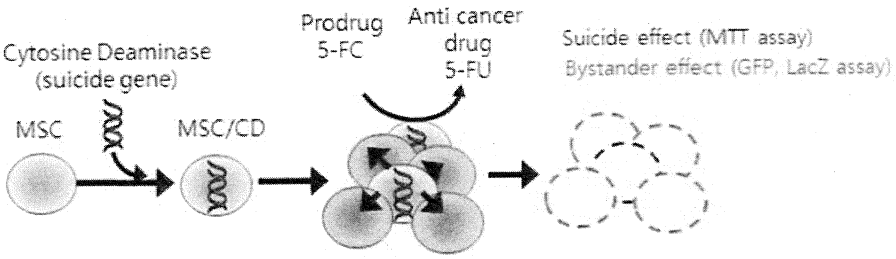
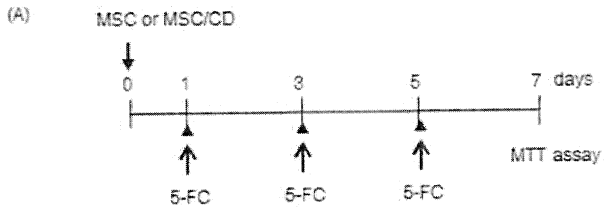


Fig. 2



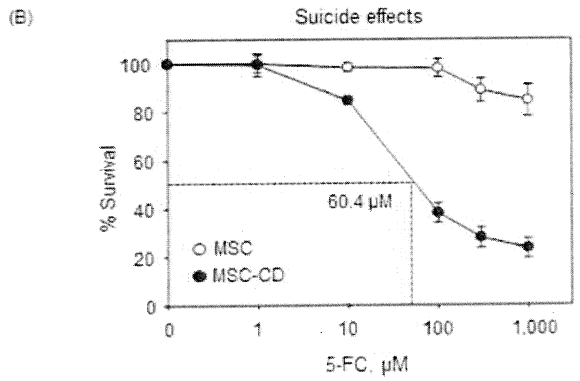
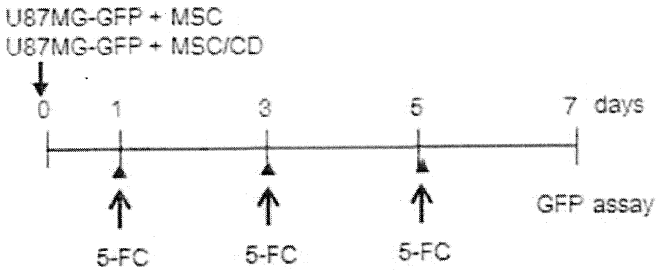
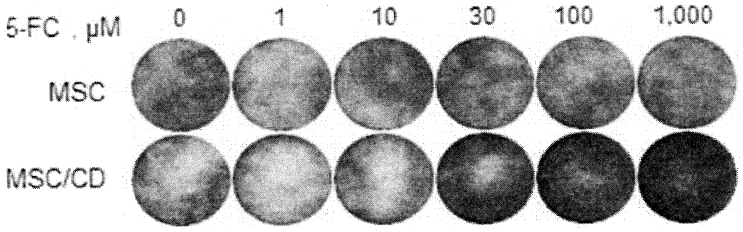


Fig. 3

(A)


U87MG-GFP + MSC
U87MG-GFP + MSC/CD
0
1
3
5
7 days
GFP assay
5-FC
5-FC
5-FC

(B)


5-FC , μM
0
1
10
30
100
1,000
MSC
MSC/CD

(C)

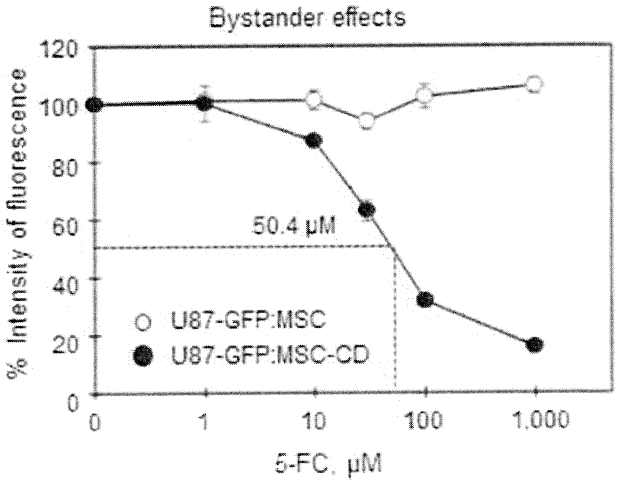

Bystander effects
% Intensity of fluorescence
120
100
80
60
40
20
0
50.4 μM
U87-GFP:MSC
U87-GFP:MSC-CD
0
1
10
100
1,000
5-FC, μM

Fig. 4

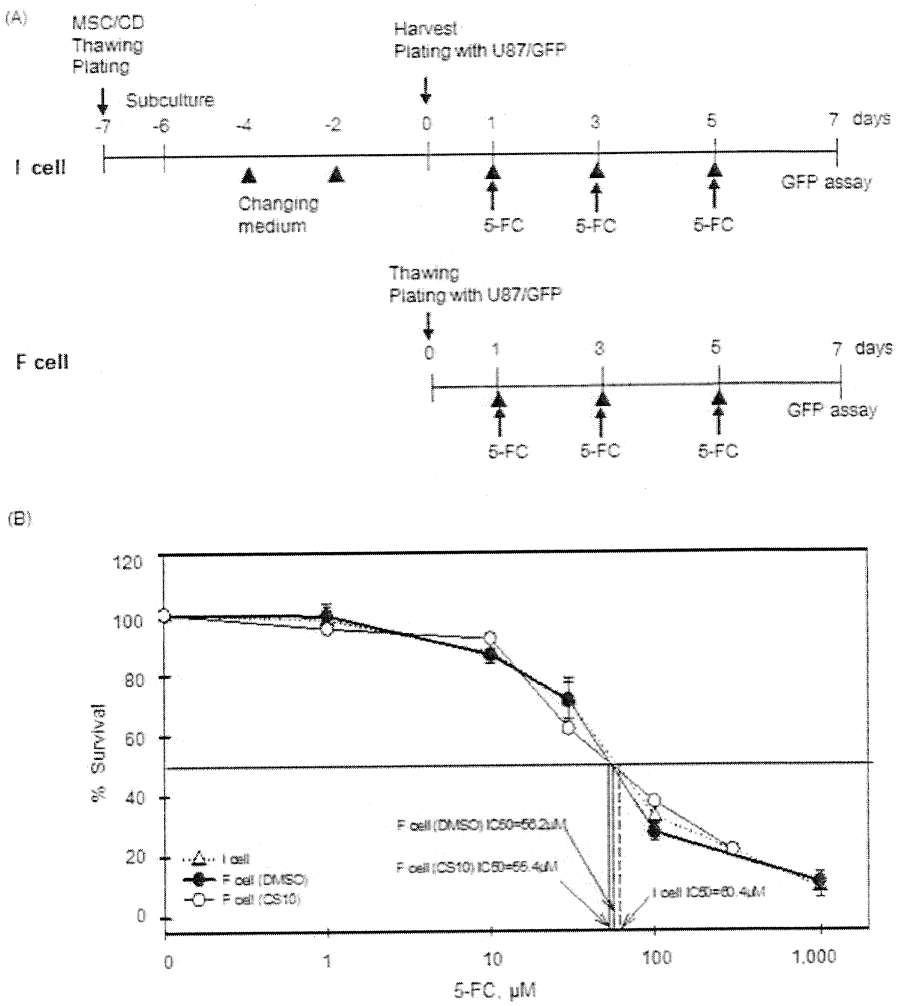

(A)
MSC/CD
Thawing
Plating
Subculture
Harvest
Plating with U87/GFP
-7
-6
-4
-2
0
1
3
5
7 days
I cell
Changing
medium
5-FC
5-FC
5-FC
GFP assay
Thawing
Plating with U87/GFP
F cell
0
1
3
5
7 days
5-FC
5-FC
5-FC
GFP assay
(B)
% Survival
120
100
80
60
40
20
0
I cell
F cell (DMSO)
F cell (CS10)
F cell (DMSO) IC50=66.2uM
F cell (CS10) IC50=55.4uM
I cell IC50=60.4uM
0
1
10
100
1,000
5-FC, μM

Fig. 5

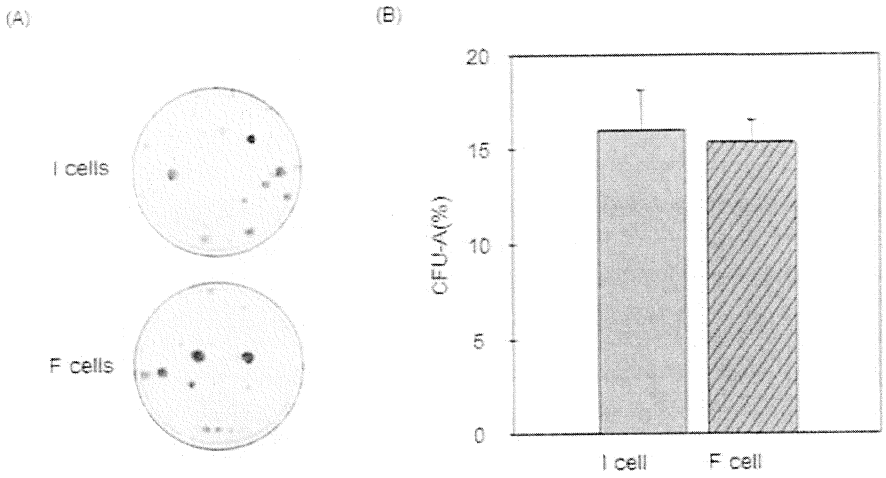
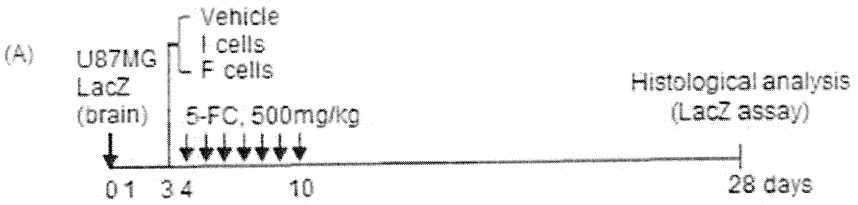
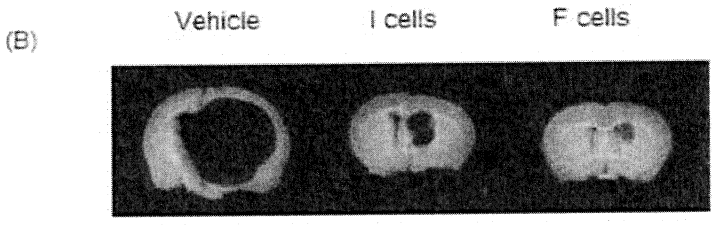


Fig. 6


(A)
U87MG
LacZ
(brain)
Vehicle
I cells
F cells
5-FC, 500mg/kg
Histological analysis
(LacZ assay)
0 1
3 4
10
28 days


(B)
Vehicle
I cells
F cells

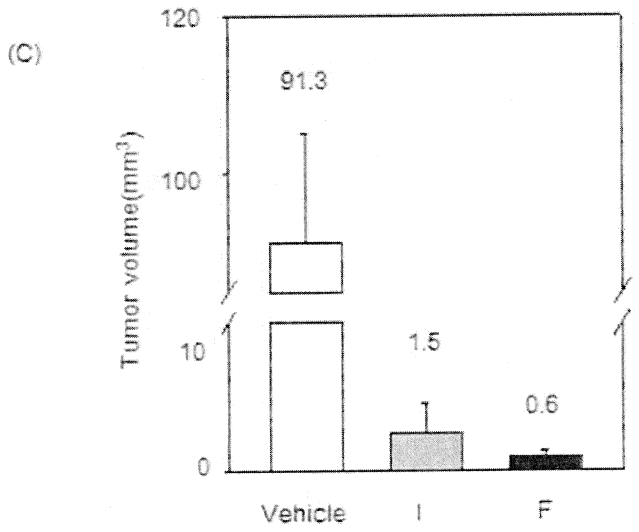

(C)
120
100
10
0
Tumor volume(mm3)
91.3
1.5
0.6
Vehicle
I
F

Fig. 7

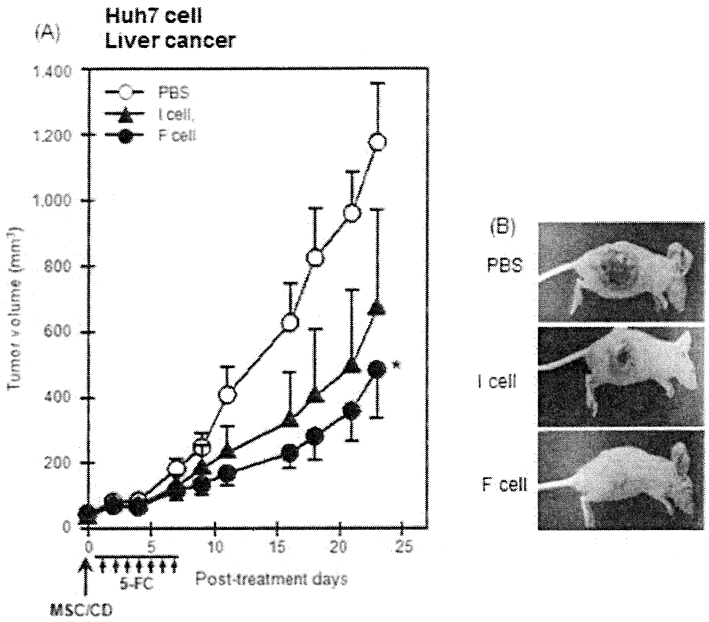

(A)
Huh7 cell
Liver cancer
PBS
I cell
F cell
Tumor volume (mm³)
1,400
1,200
1,000
800
600
400
200
0
0
5
10
15
20
25
5-FC
Post-treatment days
MSC/CD
(B)
PBS
I cell
F cell

Fig. 8

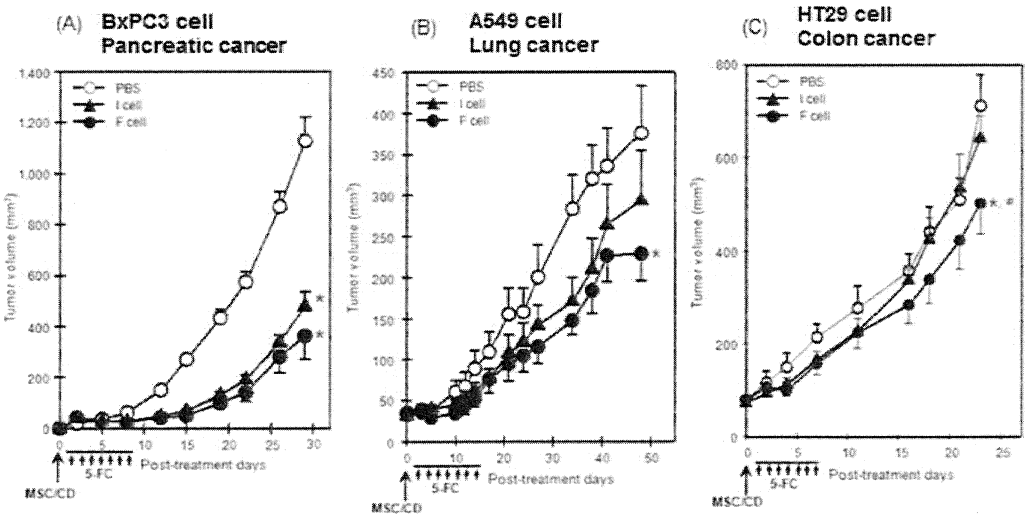

(A) BxPC3 cell
Pancreatic cancer
(B) A549 cell
Lung cancer
(C) HT29 cell
Colon cancer
PBS
I cell
F cell
Tumor volume (mm³)
5-FC
Post-treatment days
MSC/CD

Fig. 9

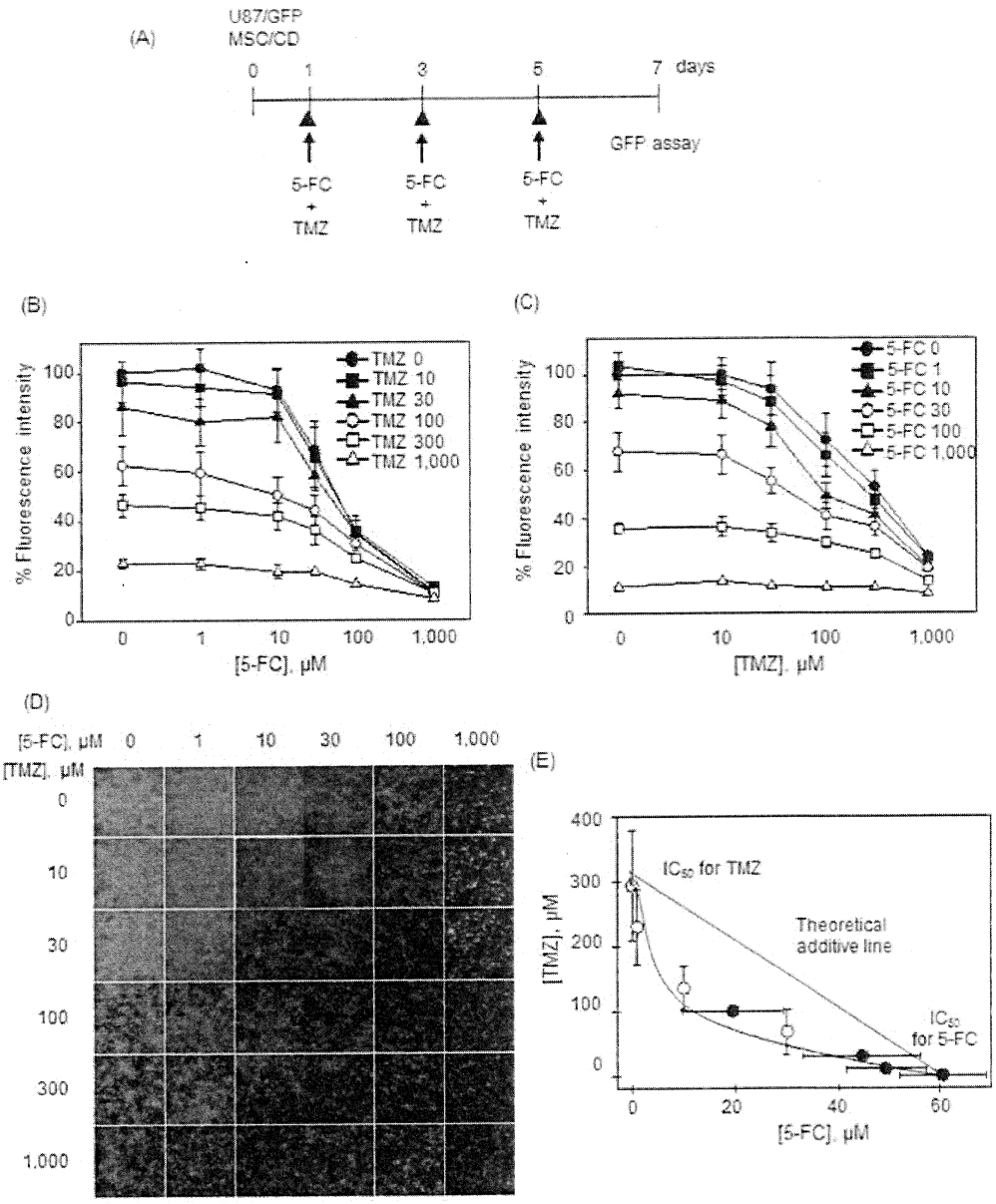

(A)
U87/GFP
MSC/CD
0
1
3
5
7 days
GFP assay
5-FC + TMZ
5-FC + TMZ
5-FC + TMZ
(B)
% Fluorescence intensity
TMZ 0
TMZ 10
TMZ 30
TMZ 100
TMZ 300
TMZ 1,000
[5-FC], μM
(C)
% Fluorescence intensity
5-FC 0
5-FC 1
5-FC 10
5-FC 30
5-FC 100
5-FC 1,000
[TMZ], μM
(D)
[5-FC], μM
[TMZ], μM
(E)
[TMZ], μM
IC50 for TMZ
Theoretical additive line
IC50 for 5-FC
[5-FC], μM

Fig. 10

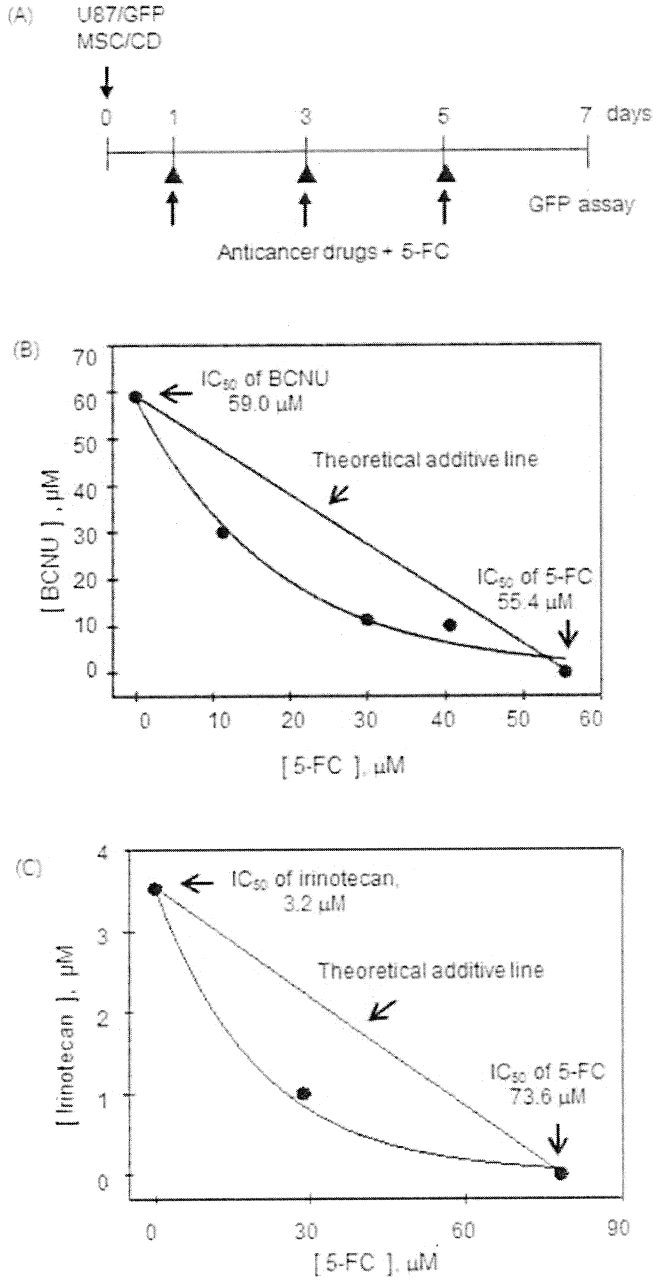

(A)
U87/GFP
MSC/CD
0
1
3
5
7 days
GFP assay
Anticancer drugs + 5-FC
(B)
IC50 of BCNU
59.0 μM
Theoretical additive line
IC50 of 5-FC
55.4 μM
[BCNU], μM
[5-FC], μM
(C)
IC50 of irinotecan,
3.2 μM
Theoretical additive line
IC50 of 5-FC
73.6 μM
[Irinotecan], μM
[5-FC], μM

Fig. 11

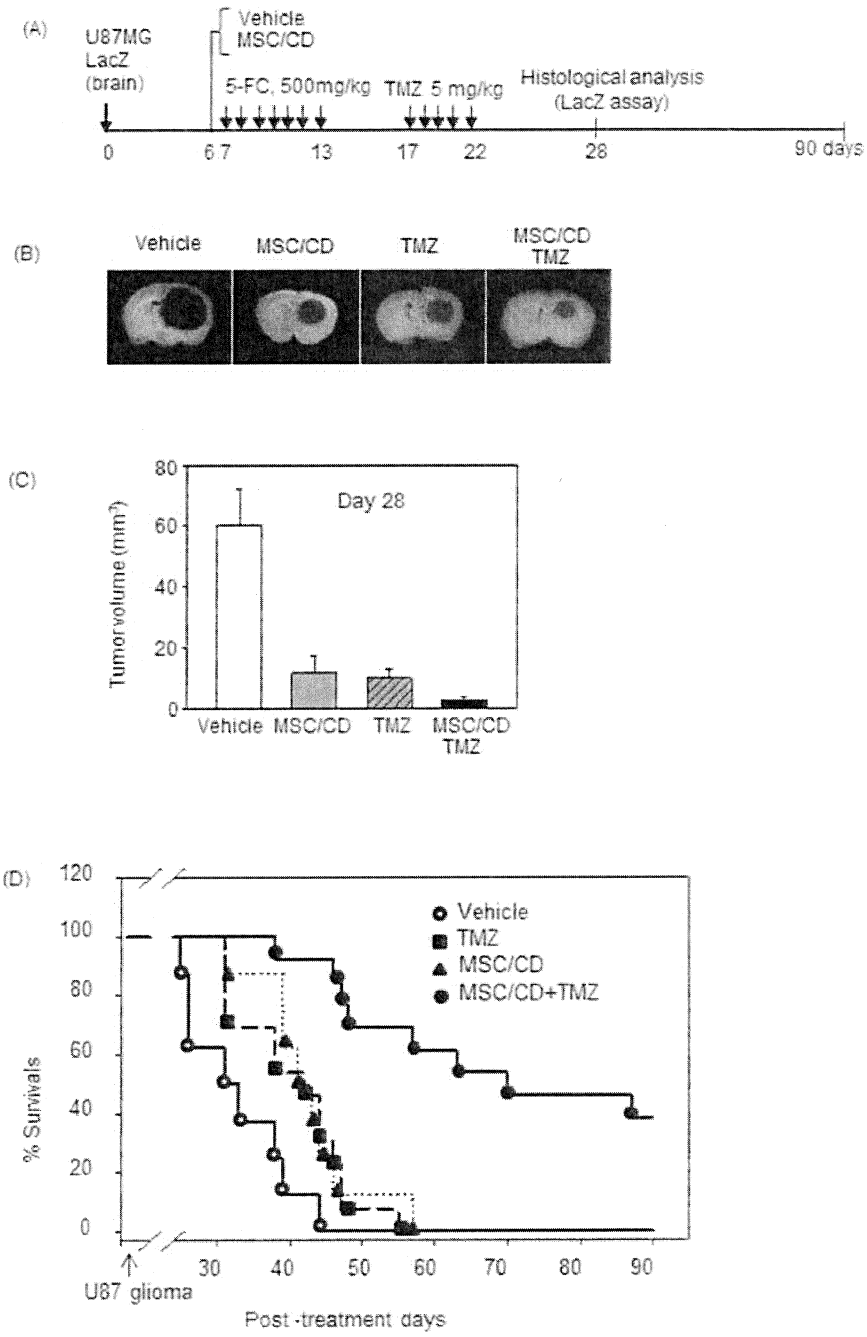
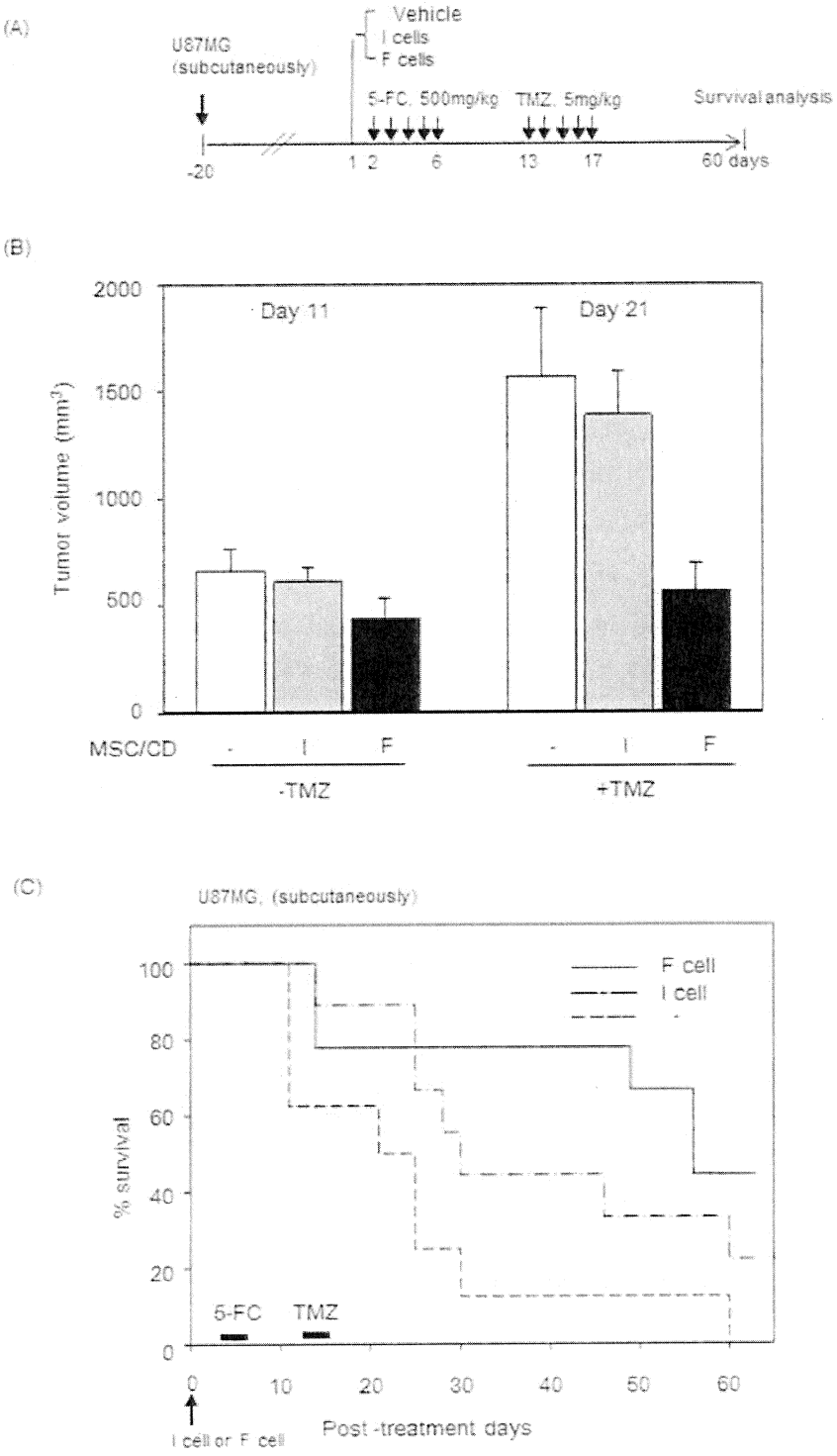

(A)
U87MG
LacZ
(brain)
Vehicle
MSC/CD
5-FC, 500mg/kg
TMZ 5 mg/kg
Histological analysis
(LacZ assay)
0
6 7
13
17
22
28
90 days
(B)
Vehicle
MSC/CD
TMZ
MSC/CD
TMZ
(C)
Day 28
Tumor volume (mm³)
80
60
40
20
0
Vehicle
MSC/CD
TMZ
MSC/CD
TMZ
(D)
120
100
80
60
40
20
0
% Survivals
Vehicle
TMZ
MSC/CD
MSC/CD+TMZ
30
40
50
60
70
80
90
U87 glioma
Post -treatment days

Fig. 12


(A)
U87MG
(subcutaneously)
Vehicle
I cells
F cells
5-FC, 500mg/kg
TMZ, 5mg/kg
Survival analysis
-20
1 2
6
13
17
60 days
(B)
Day 11
Day 21
Tumor volume (mm3)
2000
1500
1000
500
0
MSC/CD
-
I
F
-TMZ
+TMZ
(C)
U87MG, (subcutaneously)
F cell
I cell
% survival
100
80
60
40
20
0
5-FC
TMZ
0
10
20
30
40
50
60
I cell or F cell
Post -treatment days